WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)		
(51) International Patent Classification ⁶ : D21H 17/67, 17/64	A1	(11) International Publication Number: WO 99/49133 (43) International Publication Date: 30 September 1999 (30.09.99)
 (21) International Application Number: PCT/CAS (22) International Filing Date: 17 March 1999 (1997) (30) Priority Data: 60/079,097 23 March 1998 (23.03.98) (71) Applicant: PULP AND PAPER RESEARCH INSTITT CANADA [CA/CA]; 570 Boulevard St-Jean, Point Quebec H9R 3J9 (CA). (72) Inventors: MIDDLETON, Steven, R.; Apartment of Stillview Avenue, Pointe Claire, Quebec H9R 2NDESMEULES, Josee; 5034 rue Adam, Montreal, H1V 1W6 (CA). SCALLAN, Anthony, M.; 162 Corpointe Claire, Quebec H9R 3S7 (CA). (74) Agents: MURPHY, Kevin, P. et al.; Swabey Ogilvy-Suite 1600, 1981 McGill College Avenue, Montreal H3A 2Y3 (CA). 	UTE Cote Clair 703, 21 CY Quebe colbreez	BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published With international search report.
(54) Title: METHOD FOR PRODUCING PULP AND PAPER WITH CALCIUM CARBONATE FILLER		
(57) Abstract		
A method is described for attaining high levels of loading of calcium carbonate fillers in the lumens of wood pulp fibres. The pulp is pretreated with a cationic polymer prior to being impregnated with the filler. Different conditions of pH and temperature are specified depending on whether the filler is a precipitated calcium carbonate or a ground calcium carbonate. The lumen-loaded pulps are used to make novel products with advantages in higher filler retention and sheet strength over conventionally made papers.		